

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-6 (Canceled).

Claim 7 (Previously Presented) A modified acetylcholine receptor subunit comprising the amino acid sequence shown in SEQ ID NO: 3, wherein the modified acetylcholine receptor subunit comprises an α subunit of a vertebrate acetylcholine receptor having a region which is homologous with the amino acid sequence shown in SEQ ID NO: 1, wherein at least one amino acid in the region of the α subunit of the vertebrate acetylcholine receptor which is homologous with the amino acid sequence shown in SEQ ID NO: 1 is replaced by an amino acid which occurs at the identical position in the corresponding region of an α subunit of an insect acetylcholine receptor, and wherein the replacement of the at least one amino acid in the region of the α subunit results in a change of the amino acid sequence when compared with the amino acid sequence of the α subunit wherein no replacement has occurred.

Claims 8-12 (Canceled).

Claim 13 (Previously Presented) A nucleic acid comprising a nucleotide sequence which codes for a modified acetylcholine receptor subunit, wherein the modified acetylcholine receptor subunit comprises an α subunit of a vertebrate acetylcholine receptor having a region which is homologous with the amino acid sequence shown in SEQ ID NO: 1, wherein at least one amino acid in the region of the α subunit of the vertebrate acetylcholine receptor which is homologous with the amino acid sequence shown in SEQ ID NO: 1 is replaced by an amino acid which occurs at the identical position in the corresponding region of an α subunit of an insect acetylcholine receptor, and wherein the replacement of the at least one amino acid in the region of the α subunit results in a change of the amino acid sequence when compared with the amino acid sequence of the α subunit wherein no replacement has occurred, and wherein the nucleotide sequence comprises the sequence shown in SEQ ID NO: 2.

Claims 14-23 (Canceled).

Claim 24 (Previously Presented) A modified acetylcholine receptor comprising an acetylcholine receptor subunit of Claim 7.

Claim 25 (Canceled).

Claim 26 (Previously Presented) A DNA construct comprising SEQ ID NO: 2 and a heterologous promoter.

Claim 27 (Previously Presented) A vector comprising a DNA construct according to Claim 26.

Claim 28 (Previously Presented) A vector according to Claim 27, wherein the nucleic acid is functionally linked to regulatory sequences which ensure expression of the nucleic acid in prokaryotic or eukaryotic cells.

Claim 29 (Previously Presented) A host cell containing a DNA construct according to Claim 26.

Claim 30 (Previously Presented) An isolated acetylcholine receptor comprising β subunit and an α subunit, wherein the α subunit comprises SEQ ID NO: 3.

Claims 31-32 (Canceled).